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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/275,527	03/24/1999	DAVID KARCHMER	ALTRP049/A44	9876
22434	7590	05/19/2004	EXAMINER	
BEYER WEAVER & THOMAS LLP P.O. BOX 778 BERKELEY, CA 94704-0778			CRAIG, DWIN M	
		ART UNIT		PAPER NUMBER
		2123		15
DATE MAILED: 05/19/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/275,527	KARCHMER ET AL.	
Examiner		Art Unit	
Dwin M Craig		2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 3-1-2204 .

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-28 is/are pending in the application.

4a) Of the above claim(s) 3,14 and 15 is/are withdrawn from consideration.

5) Claim(s) 11-13 and 16-27 is/are allowed.

6) Claim(s) 1,7 and 28 is/are rejected.

7) Claim(s) 2,4-6 and 8-10 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_ .

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

<p>1)<input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2)<input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3)<input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .</p>	<p>4)<input type="checkbox"/> Interview Summary (PTO-413) Paper No(s) _____ .</p> <p>5)<input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6)<input type="checkbox"/> Other: _____ .</p>
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## DETAILED ACTION

1. Claims 1, 2, 4-13 and 16-28 have been presented for reconsideration in view of Applicants amended claims, Claims 3, 14 and 15 have been cancelled.

### Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2.1 Independent **Claims 1 and 28** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over **Claim 1** of U.S. Patent No. 6,697,773.

An obvious-type double patenting rejection is appropriate where the conflicting claims are not identical, but an examined application claim is not patentably distinct from the reference claim(s) because the examined claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985).

Although the conflicting claims are not identical, they are not patentably distinct from each other because, it would have been obvious, to an artisan of ordinary skill to have a query,

control flow, null and suspend types of control nodes in an annotated (Assignment Decision Diagram) **ADD** because these types of nodes would be useful in controlling the flow of a simulation as claimed in Independent **Claim 1** of U.S. Patent 6,697,773. For example, the claimed limitation in independent **Claim 1** of U.S. Patent 6,697,773, *whereby the simulation may be stopped when control nodes are encountered*, is describing a “*suspend*” type of control node, further it would be obvious to have a “*null*” type of control node to use as a place holder, and further still the use of “*query*” and “*control flow*” control nodes would be required to perform debugging because the nodes would have to be annotated to provide “*break points*” for use with the debugger, as claimed in Independent **Claims 1 and 28** of the current application.

**2.2** Independent **Claim 7** is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over **Claim 8** of U.S. Patent No. 6,697,773.

An obvious-type double patenting rejection is appropriate where the conflicting claims are not identical, but an examined application claim is not patentably distinct from the reference claim(s) because the examined claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985).

Although the conflicting claims are not identical, they are not patentably distinct from each other because, it would have been obvious, to an artisan of ordinary skill to have a method of annotating control nodes of an (Assignment Decision Diagram) **ADD** because these types of nodes would be useful in allowing the observation of the state of a particular process block while

the simulation was running as claimed in Independent **Claim 8** of U.S. Patent 6,697,773. It is noted by the Examine that the claimed limitation in independent **Claim 8** of U.S. Patent 6,697,773, *determining a state corresponding to the control nodes for maintaining control flow through the process block as well as determining a state corresponding to the control node within the process block thereby eliminating an atomic nature of the process block so as to improve debugging of the electronic design*, reads directly on Independent **Claim 7**'s limitation of *a state within the process block associated with the control node can be directly observed thereby eliminating an atomic nature of the process block so as to provide the non-atomic behavioral simulation*.

**Allowable Subject Matter**

3. The following is an Examiner's reasons for allowance: Independent **Claims 11 and 27** have the following limitations in combination with other limitations: *a control node selected from a group comprising, a query control node used to represent a conditional branch in a control flow, an evaluation/assignment node used to represent an assignment operation, a null control node as a place holder, and a suspend control node*. This limitation, in combination with the other limitations in independent **Claims 11 and 27**, is a non-obvious modification over the prior art. Further, the combination of this limitation along with applicant's arguments in papers 5, 9 and 13 have been, in combination, persuasive to over come the prior art. Dependent **Claims 12, 13, 16-26** are allowed as they dependent from an allowed base claim.

3.1 Dependent **Claims 2, 4-6 and 8-10**, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all

of the limitations of the base claim and any intervening claims, (*see paragraph 2.1 and 2.2 above*).

**Conclusion**

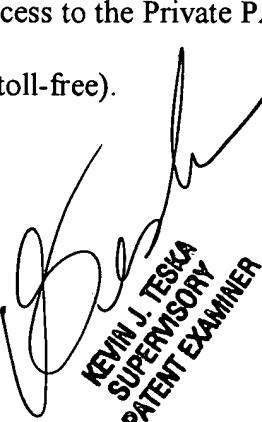
4. Independent **Claims 1, 7 and 28** are rejected based on the judicially created doctrine of non-statutory double patenting. Independent **Claims 11 and 27** and dependent **Claims 12, 13, 16-26** are allowable over the prior art of record. Dependent **Claims 2, 4-6 and 8-10** are objected to. This action is **NON-FINAL**.

4.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M Craig whose telephone number is 703 305-7150. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on 703 305-9704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMC



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